

TMDL for Diazinon in Chollas Creek Watershed

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Resolution No. R9-2002-0123

**Total Maximum Daily Load
(TMDL)
for Diazinon in
Chollas Creek Watershed
San Diego County**



Toxicity in Storm Water





TMDL for Diazinon in Chollas Creek Watershed

Toxicity testing

- Water flea
- Freshwater minnow





TMDL for Diazinon in Chollas Creek Watershed

- TIE to determine primary constituents causing toxicity in stormwater samples

Diazinon?

?

Copper?

Lead?

Zinc?

Chlorpyrifos?

TMDL for Diazinon in Chollas Creek Watershed

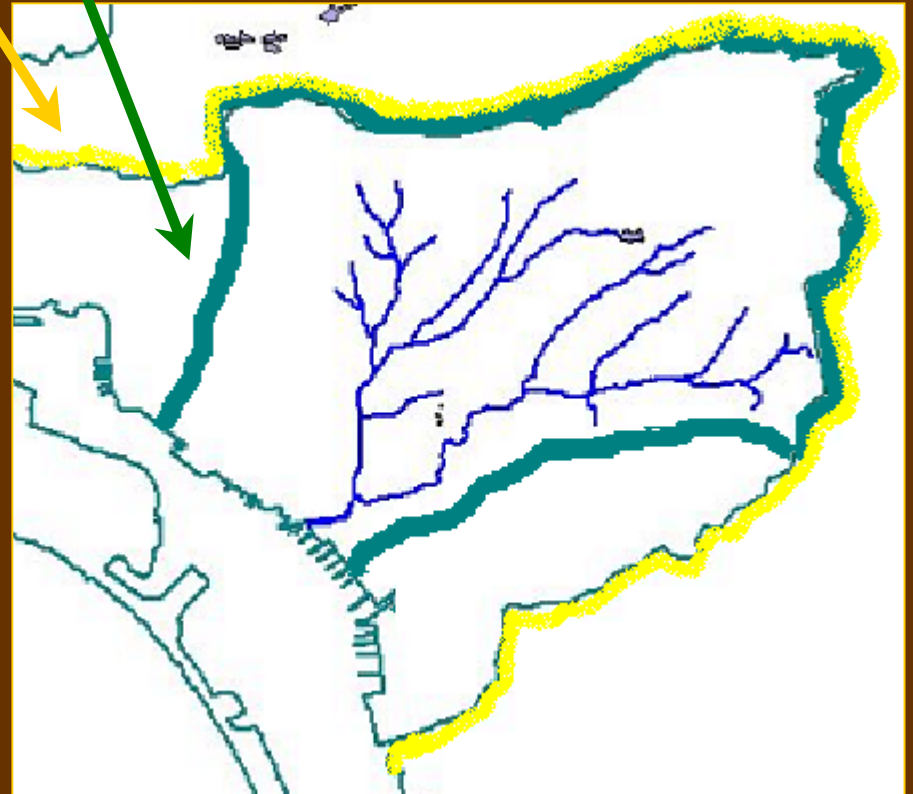


- **Clean Water Act,
Section 303(d) list**
- **Requires Regional
Board to develop a
TMDL**

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Pueblo San Diego

Chollas Creek watershed





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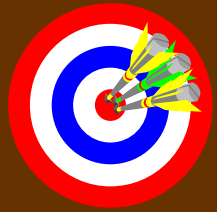
Concentration-based TMDL

- **Numeric Targets =**

**California Department of Fish and Game
Water Quality Criteria for protection of
freshwater aquatic life from diazinon**

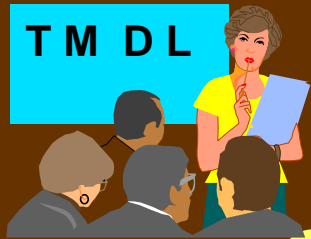
- **Acute criterion = 0.08 ug/L**

- **Chronic criterion = 0.05 ug/L**



TMDL for Diazinon in Chollas Creek Watershed

- **10% Margin of Safety**
- **Waste Load and Load Allocations are applied equally to all diazinon discharge sources**
 - **Allocations 90% numeric targets**
 - **0.072 ug/L acute exposure**
 - **0.045 ug/L chronic exposure**



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- **Scientific peer review**



TMDL for Diazinon in Chollas Creek Watershed

TMDL Implementation Plan

- (1) USEPA diazinon phase-out**
- (2) Modification of MS4 Permit**
- (3) Reduce diazinon discharges**



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TMDL Implementation Plan

(3) Reduce Diazinon discharges

- (a) Enforce existing local ordinances & adopt new legal authority
- (b) *Diazinon Toxicity Control Plan*
- (c) Focused public outreach/ education program on diazinon waste load reduction
- (d) Diazinon source analysis



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TMDL Implementation Plan

- (4 & 5) Compliance MS4 permit & existing
Basin Plan waste discharge prohibitions**
- (6) Enforcement authority of Regional Bd**
- (7) Modification of other existing WDRs**
- (8) Adopt new WDRs or NPDES permits**
- (9) Additional investigations & reports
pursuant to Water Code Section 13267**

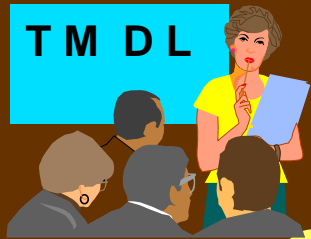


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TMDL Implementation Plan

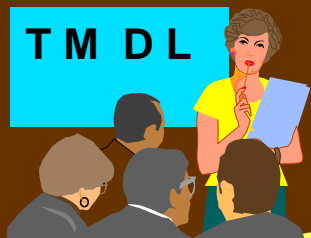
(10) Monitoring Plan

- Assess effectiveness of TMDL**
- Assess implementation measures**
 - Water Quality objectives**
 - Beneficial uses**



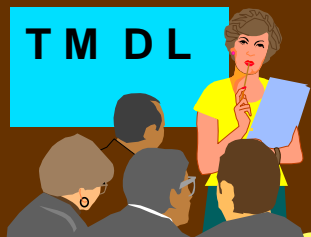
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- Environmental Review



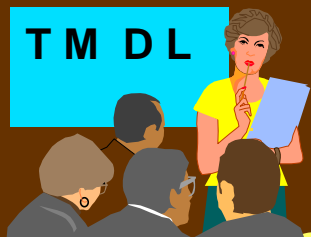
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- **Economic Consideration**
 - Interagency collaboration critical for TMDL implementation plan success
 - Cost/Benefit analysis not required
 - Only need to estimate cost of reasonably foreseeable method of compliance with requirements of TMDL



TMDL for Diazinon in Chollas Creek Watershed

- **Public participation**
 - March 17, 1999
 - August 3, 1999
 - December 17, 1999
 - May 17, 2002
- **Public comment encouraged**
 - Tentative public hearing on
June 12, 2002



TMDL for Diazinon in Chollas Creek Watershed

- **Next Steps for TMDL**
- **State Water Resources
Control Board (SWRCB)**
- **Office of Administrative Law
(OAL)**
- **US Environmental Protection
Agency (USEPA)**

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General comments or questions



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- **Public input**

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Technical TMDL

- **Problem Statement**
- **Numeric Target**
- **Source Analysis**
- **Load Capacity**
- **Allocation**
- **Margin of Safety**
- **Linkage Analysis**
- **Seasonal Variation & Critical Conditions**

TMDL for Diazinon in Chollas Creek Watershed

Tentative Public Hearing

June 12, 2002

**California Regional Water Quality
Control Board, San Diego Region**

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